Journal of the Formosan Medical Association (2014) 113, 974–975

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CORRESPONDENCE

Endobronchial mass and ipsilateral pleural effusion as presenting features of sarcoidosis

Kyung Hwa Shin [a], Ki Uk Kim [a,b,*], Geewon Lee [c], Hye-Kyung Park [a,b]

[a] Department of Internal Medicine, Pusan National University School of Medicine, Busan, South Korea
[b] Medical Research Institute, Pusan National University Hospital, Busan, South Korea
[c] Department of Radiology, Pusan National University School of Medicine, Busan, South Korea

Received 20 December 2013; received in revised form 13 January 2014; accepted 19 January 2014

A 56-year-old nonsmoking female presented to the hospital with a 3-month history of cough. She also had a 1-month history of mild shortness of breath, but no fever. She was on medication for hypertension. Laboratory data showed an increased level of serum angiotensin converting enzyme (88.6 U/L); all other laboratory test results were within normal limits. Lung function tests revealed an obstructive pattern, with a forced expiratory volume in the 1st second of 50% of the predicted value. A chest radiograph and a chest computed tomography (CT) scan revealed bilateral mediastinal and hilar lymphadenopathy, left-sided pleural effusion, and diffuse parenchymal infiltrates (Fig. 1A). Pleural fluid analysis revealed a lymphocyte-predominant transudate without malignant cells. Culture was negative for microorganisms. Flexible bronchoscopy demonstrated an endobronchial mass located at the orifice of the anterior basal segmental bronchus of the left lower lobe with nearly complete occlusion. The lesion was smooth and broad based, with increased vascularity (Fig. 1B). Bronchoalveolar lavage showed an increase in the lymphocyte population (42%) and a high CD4/CD8 ratio of 11.8. Histopathological examination of bronchial biopsy specimens revealed noncaseating granulomas consistent with sarcoidosis. Treatment with high-dose oral prednisone was commenced. A follow-up chest CT and flexible bronchoscopy at 3 months of treatment showed complete resolution of the previously observed pleural effusion and endobronchial mass lesion, respectively. She was still asymptomatic at her 9-month follow-up, at which time she was taking 10 mg of prednisone daily.

Sarcoidosis is a systemic granulomatous disease of unknown etiology that can affect any organ.[1] However, both endobronchial mass lesions and pleural effusion are rare manifestations of sarcoidosis. The prevalence of pleural effusion reportedly ranges from 0.7% to 10.0%, based on chest radiographic findings alone. According to Soskel and Sharma,[2] right-sided involvement is more common than left-sided involvement (45% vs. 33%, respectively), but bilateral occurrences are not rare (22%). Pleural effusion has been described as both an exudate and a transudate, but a lymphocytic exudate is present in most cases. Sarcoid pleural effusion usually resolves spontaneously in 1–3 months. However, a chest radiograph showed that pleural effusion in our case resolved at 2 weeks with steroid therapy, as reported previously.[3] An endobronchial mass lesion is a very rare manifestation of sarcoidosis, and only two cases have been described in the English-language literature.[4,5] In a report by Corsello et al,[4] complete resolution of an endobronchial mass was demonstrated after 2 months of corticosteroid treatment.

We herein described a case of sarcoidosis presenting as an endobronchial mass and ipsilateral pleural effusion, which has not been reported previously. This case highlights the notion that sarcoidosis should be included as a differential diagnosis in patients presenting with an endobronchial mass and pleural effusion because early treatment may improve the outcome. It is also noteworthy that

Conflicts of interest: The authors have no conflicts of interest relevant to this article.

* Corresponding author. Department of Internal Medicine, Pusan National University School of Medicine, 179, Gudeok-ro, Seo-gu, Busan 602-739, South Korea.
E-mail address: uk303@hanmail.net (K.U. Kim).

http://dx.doi.org/10.1016/j.jfma.2014.01.020

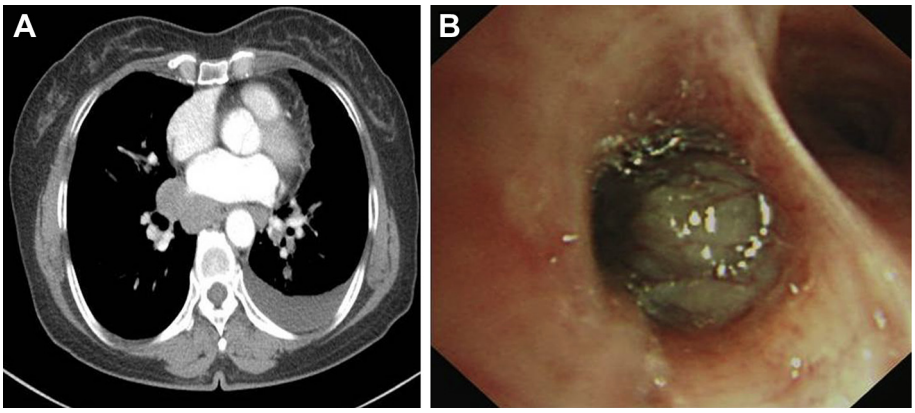

Figure 1 (A) Chest computed tomography reveals mediastinal lymphadenopathy and left pleural effusion. (B) Flexible bronchoscopy demonstrates an endobronchial mass lesion at the anterior basal segmental bronchus of the left lower lobe.

flexible bronchoscopy should be performed to search for an endobronchial mass in a patient suspected to have sarcoidosis based on CT findings and who shows an obstructive pattern on spirometry, even when CT scans do not reveal an endobronchial mass lesion, as in our patient.

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